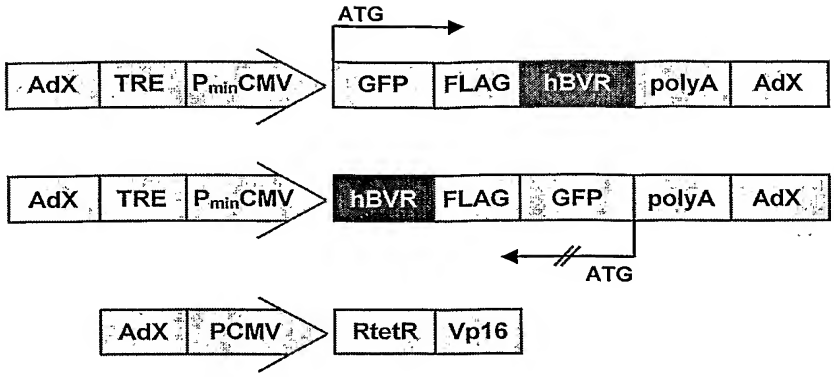
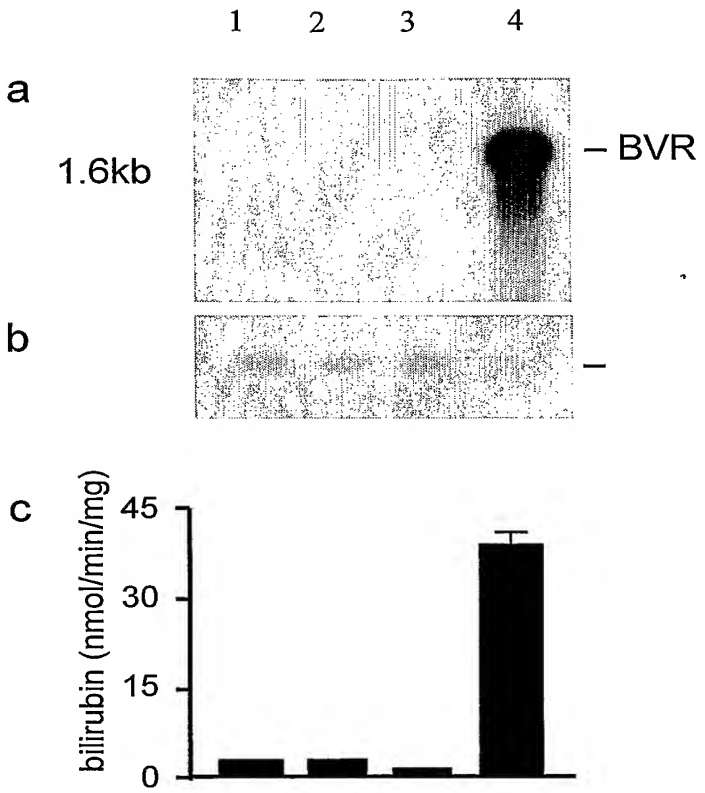


AdX = recombinant Adeno – X virus
TRE = Tet – responsive Element
$P_{min}CMV$ = minimal immediate early promoter of ctyomegalovirus
GFP = gene GFP
FLAG = M_2 flag sequence
hBVR = gene BVLR
VP16 = C-terminal activation domain of *Herpes simplex* virus VP16 protein
rtetR = "reverse" mutant of Tet repressor

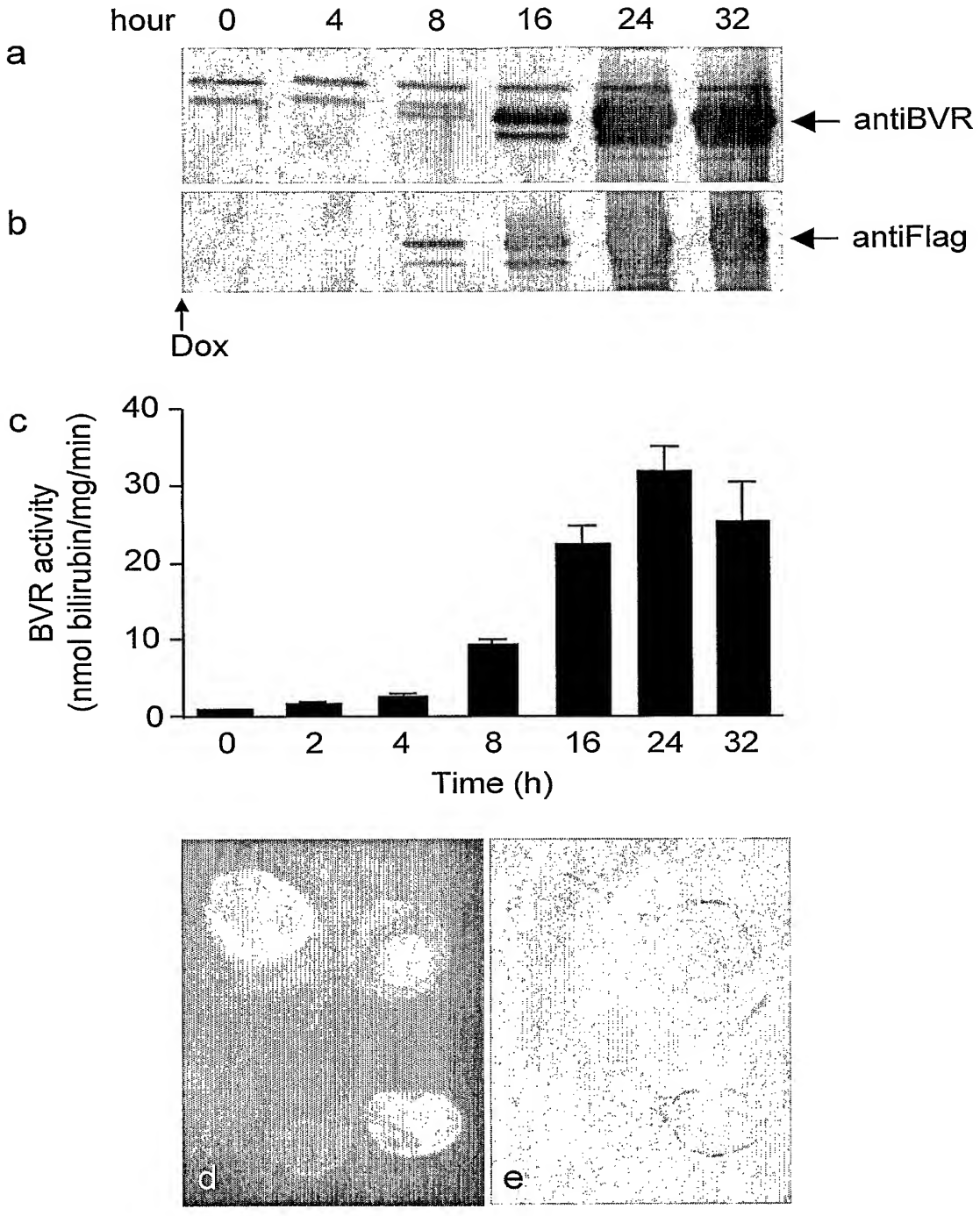
= direction of translation of ORF "GFP/FLAG/BVLRA"

= direction of transcription from $P_{min}CMV$

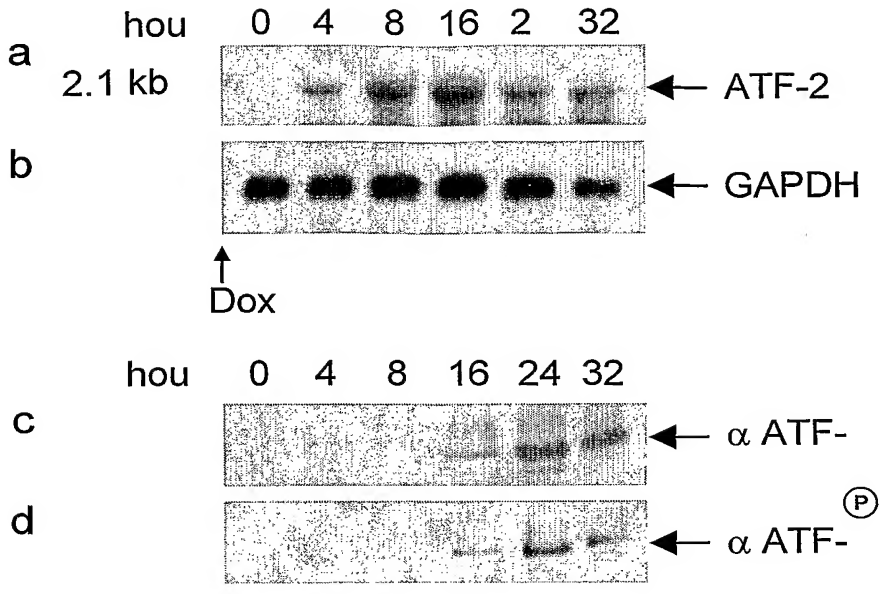
Figure 1



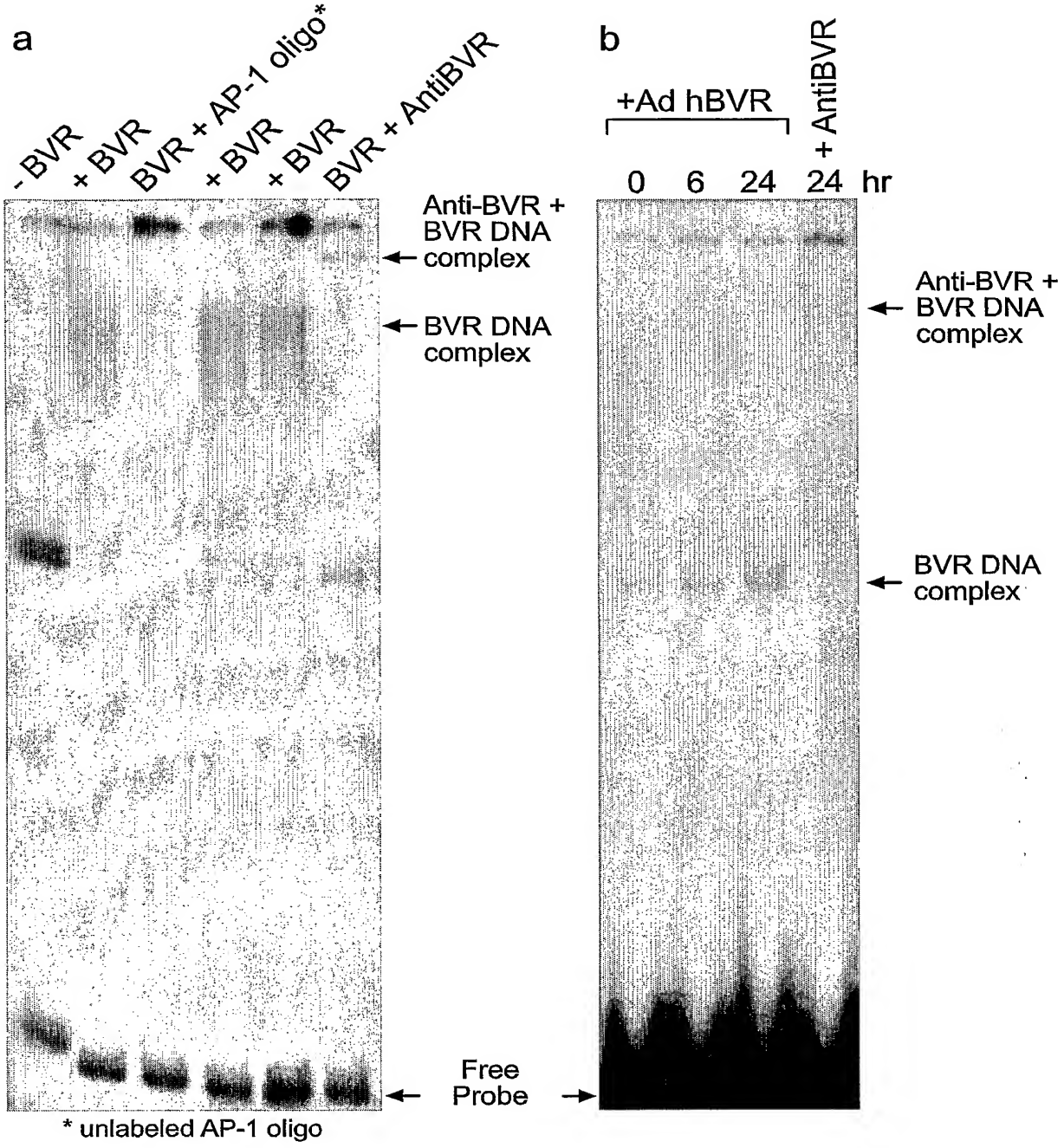
Figures 2A-C


hour 0 4 8 16 24 32
a
antiBVR
b
antiFlag
Dox
c
BVR activity
(nmol bilirubin/mg/min)
40
30
20
10
0
0 2 4 8 16 24 32
Time (h)
d
e

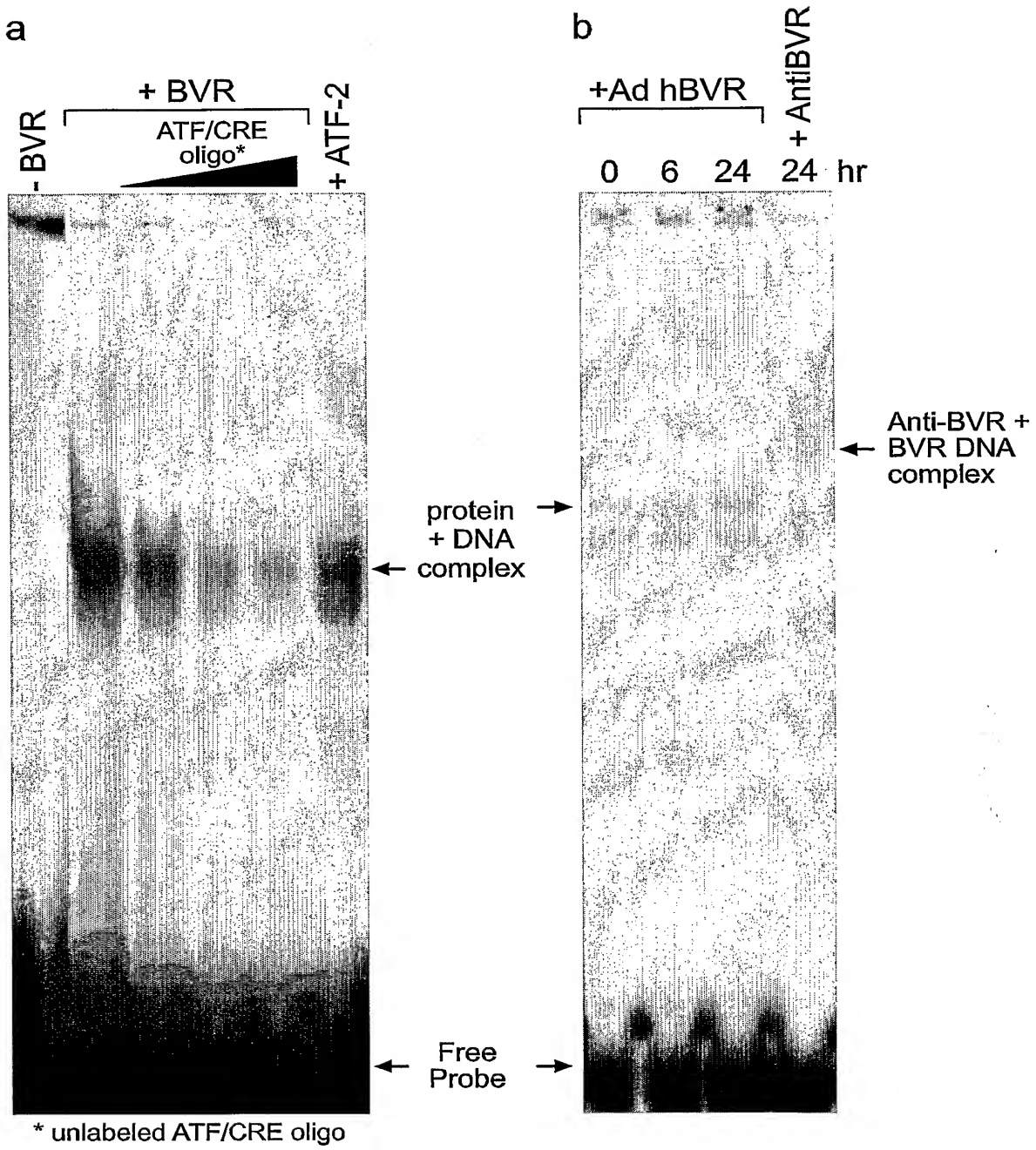
Figures 3A-E


hou
0 4 8 16 2 32
a
2.1 kb
ATF-2
b
GAPDH
Dox
hou
0 4 8 16 24 32
c
α ATF-
d
α ATF-
P

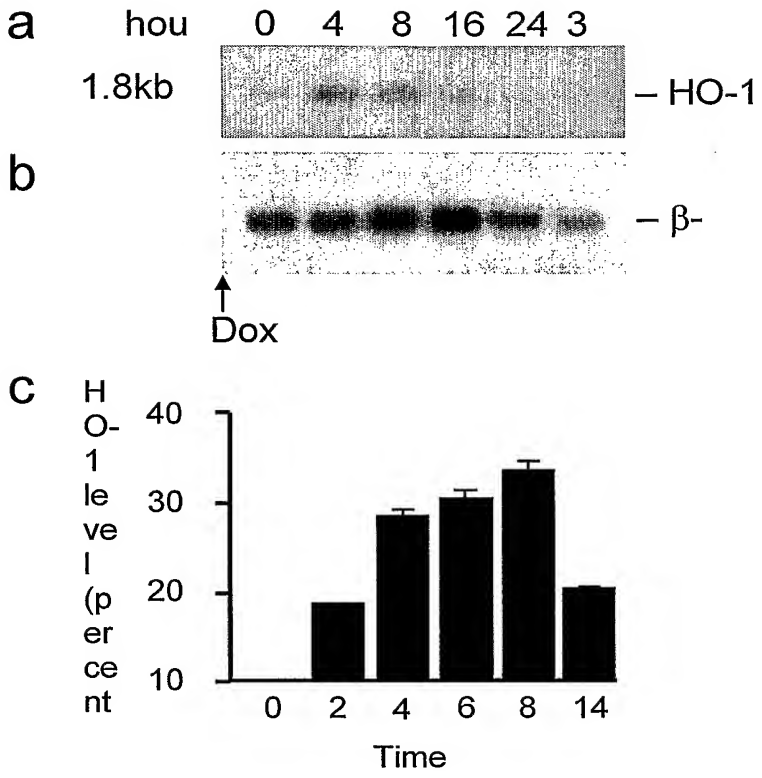
Figures 4A-D


a
- BVR
+ BVR
BVR + AP-1 oligo*
+ BVR
+ BVR
BVR + AntiBVR
Anti-BVR + BVR DNA complex
BVR DNA complex
Free Probe
* unlabeled AP-1 oligo
b
+Ad hBVR
+ AntiBVR
0 6 24 24 hr
Anti-BVR + BVR DNA complex
BVR DNA complex

Figures 5A-B


a
- BVR
+ BVR
ATF/CRE
oligo*
+ ATF-2
protein
+ DNA
complex
Free
Probe
* unlabeled ATF/CRE oligo
b
+Ad hBVR
+ AntiBVR
0 6 24 24 hr
Anti-BVR +
BVR DNA
complex

Figures 6A-B


a
hou
0 4 8 16 24 3
1.8kb
– HO-1
b
– β-
Dox
c
HO-1 level (percent
40
30
20
10
0 2 4 6 8 14
Time

Figures 7A-C

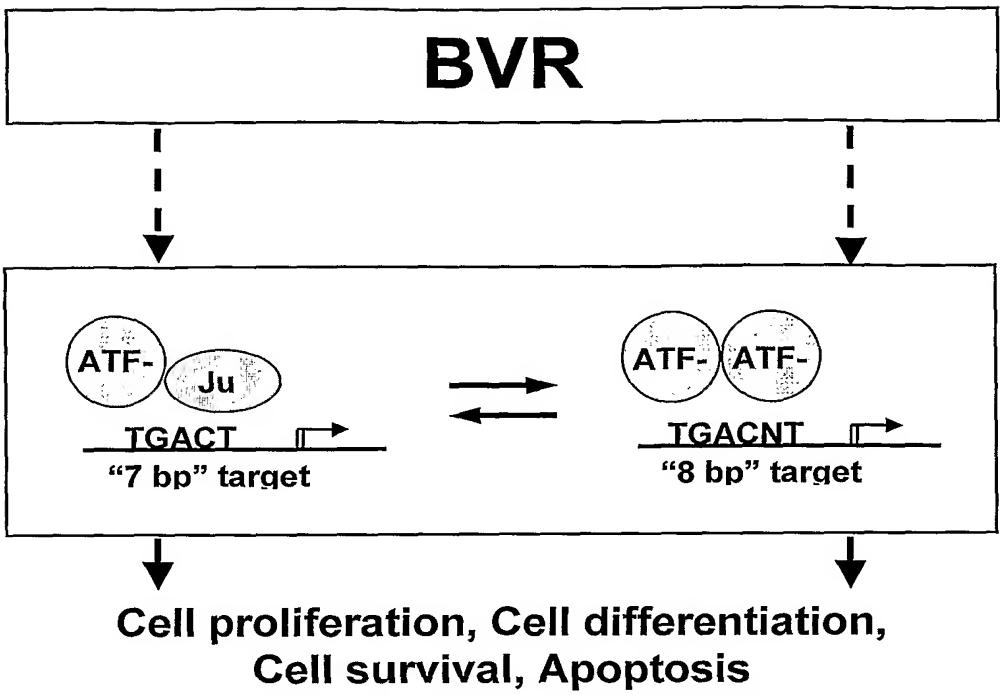

BVR
ATF-
Ju
TGACT
"7 bp" target
ATF-
ATF-
TGACNT
"8 bp" target
Cell proliferation, Cell differentiation,
Cell survival, Apoptosis

Figure 8